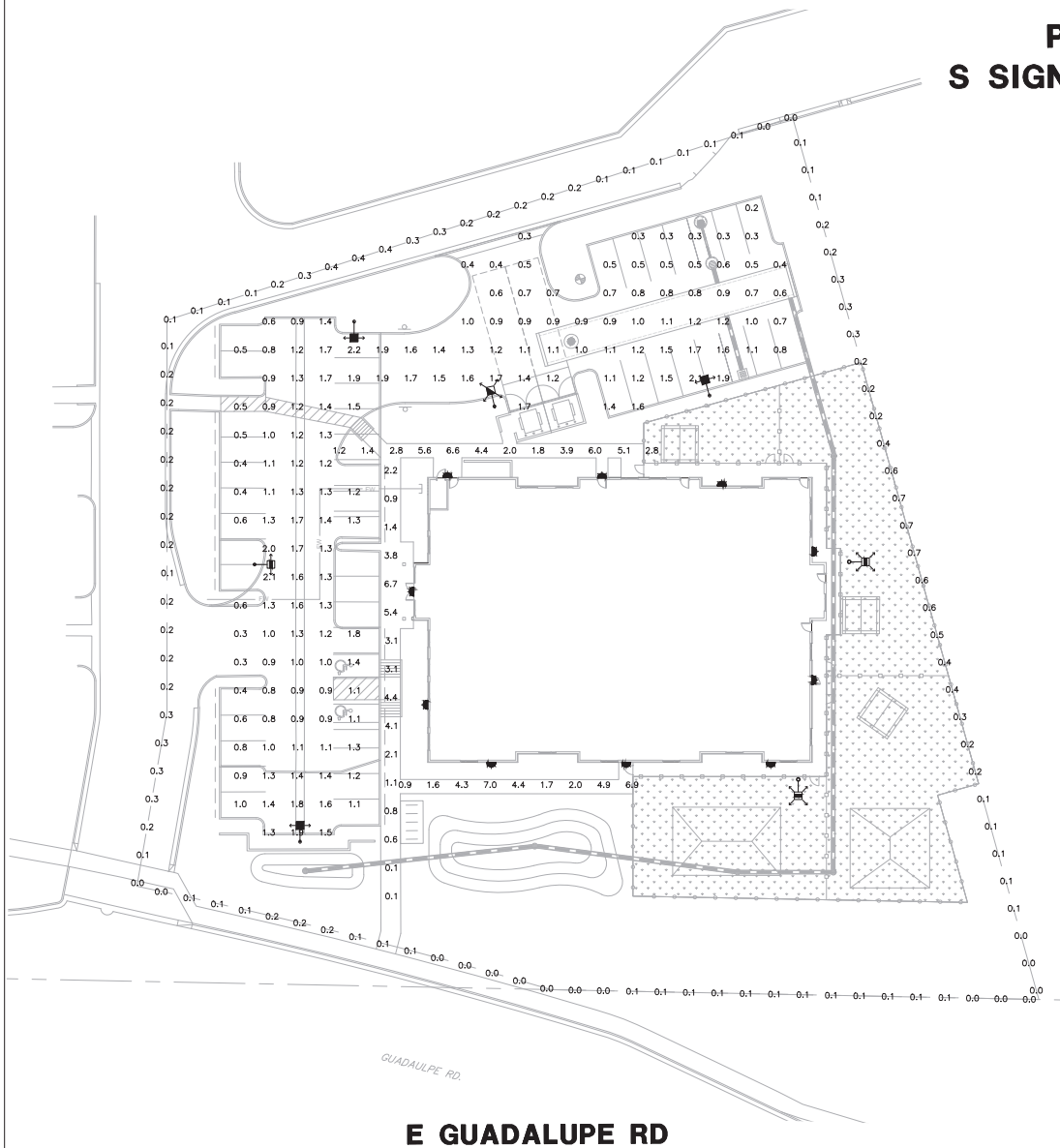
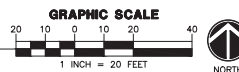


BRIGHT PATH DAYCARE #18 PHOTOMETRIC LIGHTING PLAN S SIGNAL BUTTE RD & E GUADALUPE RD MESA, ARIZONA



E GUADALUPE RD

PHOTOMETRIC SITE PLAN




CALCULATIONS


DRIVE AISLE
152 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
Average 1.1
Maximum 2.2
Minimum 0.2
Avg:Min 5.44
Max:Min 11.00
Coef Var 0.42
UniGrad 3.33


SIDEWALK
37 points
HORIZONTAL FOOTCANDLES
Average 3.2
Maximum 7.0
Minimum 0.1
Avg:Min 31.68
Max:Min 70.00
Coef Var 0.64


PROPERTY LINE
108 points
HORIZONTAL FOOTCANDLES
Average 0.2
Maximum 0.7
Minimum 0.0
Avg:Min N/A
Max:Min N/A
Coef Var 0.67


LEGEND

- 

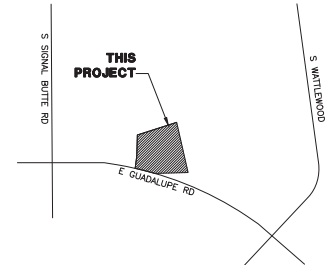
70W TYPE V LED AREA LIGHT
candela file 'DSX1_LED_P2_30K_T5W_MVOLT.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 70
mounting height= 20 ft
number locations= 1, number luminaires= 1
kw all locations= 0.1
- 

54W TYPE IV LED AREA LIGHT
candela file 'DSX1_LED_P1_30K_T4M_MVOLT.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 54
mounting height= 20 ft
number locations= 3, number luminaires= 3
kw all locations= 0.2
- 

54W TYPE III LED AREA LIGHT
candela file 'DSX1_LED_P1_30K_T3M_MVOLT.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 54
mounting height= 20 ft
number locations= 1, number luminaires= 1
kw all locations= 0.1
- 

54W TYPE V LED AREA LIGHT
candela file 'DSX1_LED_P1_30K_T5W_MVOLT.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 54
mounting height= 20 ft
number locations= 2, number luminaires= 2
kw all locations= 0.1
- 

NEW WALL LIGHT
candela file 'WDGE2_LED_P4_30K_70CRI_T4M.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.900, watts per luminaire = 47
mounting height= 7 ft
number locations= 10, number luminaires= 10
kw all locations= 0.5



VICINITY MAP
N.T.S.
NORTH

CIVIL ENGINEER:
TERRASCAPE CONSULTING, LLC
645 E MISSOURI AVE, SUITE 420
PHOENIX, AZ 85012
CONTACT: SCOTT KROUS
PHONE: (602)612-8804
EMAIL: SKROUS@TERRASCAPE.US

ELECTRICAL ENGINEER:
WRIGHT ENGINEERING CORPORATION
165 EAST CHILTON DRIVE
CHANDLER, AZ 85225
PHONE: (480) 497-5829
CONTACT: JACOB BIELEFELD
EMAIL: JBIELEFELD@WRIGHTENGINEERING.US

SHEET INDEX
SHEET PH1 - PHOTOMETRIC CALCULATIONS
SHEET PH2 - DETAILS

WRIGHT
Engineering Corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE: 480.497.5829 • FAX: 480.497.5837

**PHOTOMETRIC CALCULATION
SHEET FOR INFORMATION ONLY**

PROJECT NAME: **BRIGHT PATH DAYCARE #18
PHOTOMETRIC LIGHTING PLAN
S SIGNAL BUTTE RD & E GUADALUPE RD**

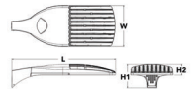
WRIGHT ENG. PROJECT NO: **23141-PH**

DESIGN BY: **CAW** **PH1**



D-Series Size 1 Legacy LED Area Luminaire

Specifications
 Depth (H1): 1.02" (26mm)
 Length: 33"
 Width: 13"
 Height H1: 7.12" (181mm)
 Height H2: 3.12" (79mm)
 Weight: 27 lbs



Introduction
 The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficiency, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED P74QK 13M MVOLT SNA PLTAIRZ PIRHN CDBXD G1

Series	LEDs	Color Temperature	Mounting	Accessories	Notes
DSX1	P74	3000K	13M	SNA	PLTAIRZ
DSX1	P74	3000K	13M	SNA	PLTAIRZ
DSX1	P74	3000K	13M	SNA	PLTAIRZ

Performance Data

Lumen Output
 Lumen values are for photometric tests performed in accordance with IESNA LM-79-02.

LED Count	Beam Angle	Power (W)	Series	Beam Type	Beam Diameter (mm)	Beam Diameter (in)	Beam Length (mm)	Beam Length (in)	Beam Area (mm²)	Beam Area (in²)	Beam Area (ft²)	Beam Area (m²)
75	14.0	2.0	DSX1	Spot	100	3.94	1000	39.4	7850	3.04	0.33	0.035
150	14.0	4.0	DSX1	Spot	100	3.94	1000	39.4	15700	6.08	0.66	0.070
225	14.0	6.0	DSX1	Spot	100	3.94	1000	39.4	23550	9.12	0.99	0.105
300	14.0	8.0	DSX1	Spot	100	3.94	1000	39.4	31400	12.16	1.32	0.140
375	14.0	10.0	DSX1	Spot	100	3.94	1000	39.4	39250	15.20	1.63	0.170
450	14.0	12.0	DSX1	Spot	100	3.94	1000	39.4	47100	18.24	1.94	0.210
525	14.0	14.0	DSX1	Spot	100	3.94	1000	39.4	54950	21.28	2.25	0.230
600	14.0	16.0	DSX1	Spot	100	3.94	1000	39.4	62800	24.32	2.56	0.270
675	14.0	18.0	DSX1	Spot	100	3.94	1000	39.4	70650	27.36	2.87	0.300
750	14.0	20.0	DSX1	Spot	100	3.94	1000	39.4	78500	30.40	3.18	0.330
825	14.0	22.0	DSX1	Spot	100	3.94	1000	39.4	86350	33.44	3.50	0.370
900	14.0	24.0	DSX1	Spot	100	3.94	1000	39.4	94200	36.48	3.81	0.400
975	14.0	26.0	DSX1	Spot	100	3.94	1000	39.4	102050	39.52	4.12	0.430
1050	14.0	28.0	DSX1	Spot	100	3.94	1000	39.4	109900	42.56	4.43	0.460
1125	14.0	30.0	DSX1	Spot	100	3.94	1000	39.4	117750	45.60	4.74	0.490
1200	14.0	32.0	DSX1	Spot	100	3.94	1000	39.4	125600	48.64	5.05	0.520
1275	14.0	34.0	DSX1	Spot	100	3.94	1000	39.4	133450	51.68	5.36	0.550
1350	14.0	36.0	DSX1	Spot	100	3.94	1000	39.4	141300	54.72	5.67	0.580
1425	14.0	38.0	DSX1	Spot	100	3.94	1000	39.4	149150	57.76	5.98	0.610
1500	14.0	40.0	DSX1	Spot	100	3.94	1000	39.4	157000	60.80	6.29	0.640
1575	14.0	42.0	DSX1	Spot	100	3.94	1000	39.4	164850	63.84	6.60	0.670
1650	14.0	44.0	DSX1	Spot	100	3.94	1000	39.4	172700	66.88	6.91	0.700
1725	14.0	46.0	DSX1	Spot	100	3.94	1000	39.4	180550	69.92	7.22	0.730
1800	14.0	48.0	DSX1	Spot	100	3.94	1000	39.4	188400	72.96	7.53	0.760
1875	14.0	50.0	DSX1	Spot	100	3.94	1000	39.4	196250	76.00	7.84	0.790
1950	14.0	52.0	DSX1	Spot	100	3.94	1000	39.4	204100	79.04	8.15	0.820
2025	14.0	54.0	DSX1	Spot	100	3.94	1000	39.4	211950	82.08	8.46	0.850
2100	14.0	56.0	DSX1	Spot	100	3.94	1000	39.4	219800	85.12	8.77	0.880
2175	14.0	58.0	DSX1	Spot	100	3.94	1000	39.4	227650	88.16	9.08	0.910
2250	14.0	60.0	DSX1	Spot	100	3.94	1000	39.4	235500	91.20	9.39	0.940
2325	14.0	62.0	DSX1	Spot	100	3.94	1000	39.4	243350	94.24	9.70	0.970
2400	14.0	64.0	DSX1	Spot	100	3.94	1000	39.4	251200	97.28	10.01	1.000
2475	14.0	66.0	DSX1	Spot	100	3.94	1000	39.4	259050	100.32	10.32	1.030
2550	14.0	68.0	DSX1	Spot	100	3.94	1000	39.4	266900	103.36	10.63	1.060
2625	14.0	70.0	DSX1	Spot	100	3.94	1000	39.4	274750	106.40	10.94	1.090
2700	14.0	72.0	DSX1	Spot	100	3.94	1000	39.4	282600	109.44	11.25	1.120
2775	14.0	74.0	DSX1	Spot	100	3.94	1000	39.4	290450	112.48	11.56	1.150
2850	14.0	76.0	DSX1	Spot	100	3.94	1000	39.4	298300	115.52	11.87	1.180
2925	14.0	78.0	DSX1	Spot	100	3.94	1000	39.4	306150	118.56	12.18	1.210
3000	14.0	80.0	DSX1	Spot	100	3.94	1000	39.4	314000	121.60	12.49	1.240
3075	14.0	82.0	DSX1	Spot	100	3.94	1000	39.4	321850	124.64	12.80	1.270
3150	14.0	84.0	DSX1	Spot	100	3.94	1000	39.4	329700	127.68	13.11	1.300
3225	14.0	86.0	DSX1	Spot	100	3.94	1000	39.4	337550	130.72	13.42	1.330
3300	14.0	88.0	DSX1	Spot	100	3.94	1000	39.4	345400	133.76	13.73	1.360
3375	14.0	90.0	DSX1	Spot	100	3.94	1000	39.4	353250	136.80	14.04	1.390
3450	14.0	92.0	DSX1	Spot	100	3.94	1000	39.4	361100	139.84	14.35	1.420
3525	14.0	94.0	DSX1	Spot	100	3.94	1000	39.4	368950	142.88	14.66	1.450
3600	14.0	96.0	DSX1	Spot	100	3.94	1000	39.4	376800	145.92	14.97	1.480
3675	14.0	98.0	DSX1	Spot	100	3.94	1000	39.4	384650	148.96	15.28	1.510
3750	14.0	100.0	DSX1	Spot	100	3.94	1000	39.4	392500	152.00	15.59	1.540
3825	14.0	102.0	DSX1	Spot	100	3.94	1000	39.4	400350	155.04	15.90	1.570
3900	14.0	104.0	DSX1	Spot	100	3.94	1000	39.4	408200	158.08	16.21	1.600
3975	14.0	106.0	DSX1	Spot	100	3.94	1000	39.4	416050	161.12	16.52	1.630
4050	14.0	108.0	DSX1	Spot	100	3.94	1000	39.4	423900	164.16	16.83	1.660
4125	14.0	110.0	DSX1	Spot	100	3.94	1000	39.4	431750	167.20	17.14	1.690
4200	14.0	112.0	DSX1	Spot	100	3.94	1000	39.4	439600	170.24	17.45	1.720
4275	14.0	114.0	DSX1	Spot	100	3.94	1000	39.4	447450	173.28	17.76	1.750
4350	14.0	116.0	DSX1	Spot	100	3.94	1000	39.4	455300	176.32	18.07	1.780
4425	14.0	118.0	DSX1	Spot	100	3.94	1000	39.4	463150	179.36	18.38	1.810
4500	14.0	120.0	DSX1	Spot	100	3.94	1000	39.4	471000	182.40	18.69	1.840
4575	14.0	122.0	DSX1	Spot	100	3.94	1000	39.4	478850	185.44	19.00	1.870
4650	14.0	124.0	DSX1	Spot	100	3.94	1000	39.4	486700	188.48	19.31	1.900
4725	14.0	126.0	DSX1	Spot	100	3.94	1000	39.4	494550	191.52	19.62	1.930
4800	14.0	128.0	DSX1	Spot	100	3.94	1000	39.4	502400	194.56	19.93	1.960
4875	14.0	130.0	DSX1	Spot	100	3.94	1000	39.4	510250	197.60	20.24	1.990
4950	14.0	132.0	DSX1	Spot	100	3.94	1000	39.4	518100	200.64	20.55	2.020
5025	14.0	134.0	DSX1	Spot	100	3.94	1000	39.4	525950	203.68	20.86	2.050
5100	14.0	136.0	DSX1	Spot	100	3.94	1000	39.4	533800	206.72	21.17	2.080
5175	14.0	138.0	DSX1	Spot	100	3.94	1000	39.4	541650	209.76	21.48	2.110
5250	14.0	140.0	DSX1	Spot	100	3.94	1000	39.4	549500	212.80	21.79	2.140
5325	14.0	142.0	DSX1	Spot	100	3.94	1000	39.4	557350	215.84	22.10	2.170
5400	14.0	144.0	DSX1	Spot	100	3.94	1000	39.4	565200	218.88	22.41	2.200
5475	14.0	146.0	DSX1	Spot	100	3.94	1000	39.4	573050	221.92	22.72	2.230
5550	14.0	148.0	DSX1	Spot	100	3.94	1000	39.4	580900	224.96	23.03	2.260
5625	14.0	150.0	DSX1	Spot	100	3.94	1000	39.4	588750	228.00	23.34	2.290
5700	14.0	152.0	DSX1	Spot	100	3.94	1000	39.4	596600	231.04	23.65	2.320
5775	14.0	154.0	DSX1	Spot	100	3.94	1000	39.4	604450	234.08	23.96	2.350
5850	14.0	156.0	DSX1	Spot	100	3.94	1000	39.4	612300	237.12	24.27	2.380
5925	14.0	158.0	DSX1	Spot	100	3.94	1000	39.4	620150	240.16	24.58	2.410
6000	14.0	160.0	DSX1	Spot	100	3.94	1000	39.4	628000	243.20	24.89	2.440
6075	14.0	162.0	DSX1	Spot	100	3.94	1000	39.4	635850	246.24	25.20	2.470
6150	14.0	164.0	DSX									