

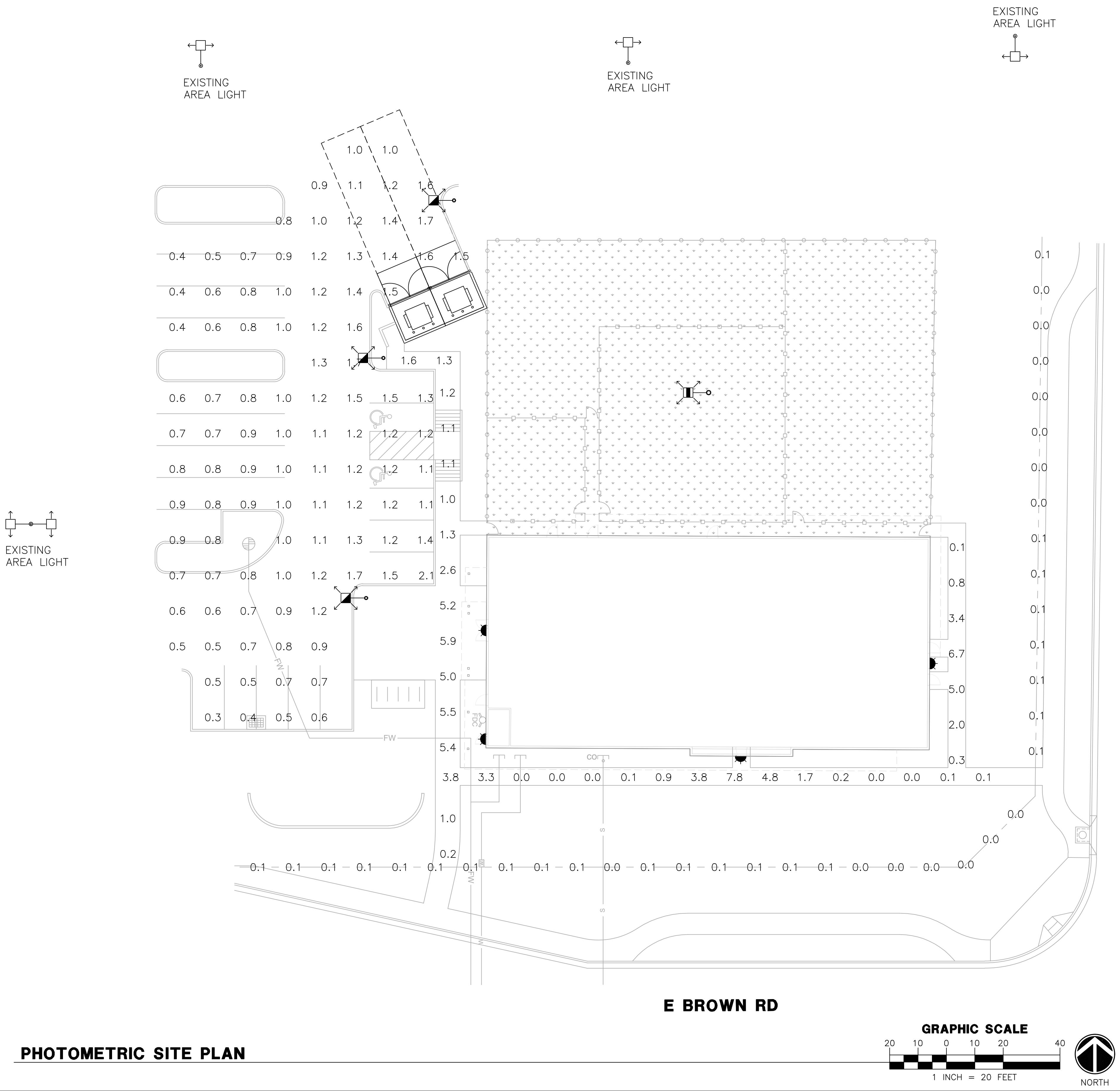
# BRIGHT PATH DAYCARE #16

## PHOTOMETRIC LIGHTING DESIGN

### N VAL VISTA DR & E BROWN RD

### MESA, ARIZONA

E MCLELLAN RD



EXISTING  
AREA LIGHT

EXISTING  
AREA LIGHT

EXISTING  
AREA LIGHT

#### LEGEND

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= 1, number luminaires= 1  
kw all locations= 0.1

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= 3, number luminaires= 3  
kw all locations= 0.2

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= 4, number luminaires= 4  
kw all locations= 0.2

EXISTING AREA LIGHT  
candela file 'GE178305.IES'  
1 lamp(s) per luminaire, 8800 initial lumens per lamp  
Light Loss Factor = 0.900, watts per luminaire = 119  
mounting height= 20 ft  
number locations= 5, number luminaires= 5  
kw all locations= 0.6

#### CALCULATIONS

DRIVE AISLE  
100 points at z=0, sp 10ft by 10ft

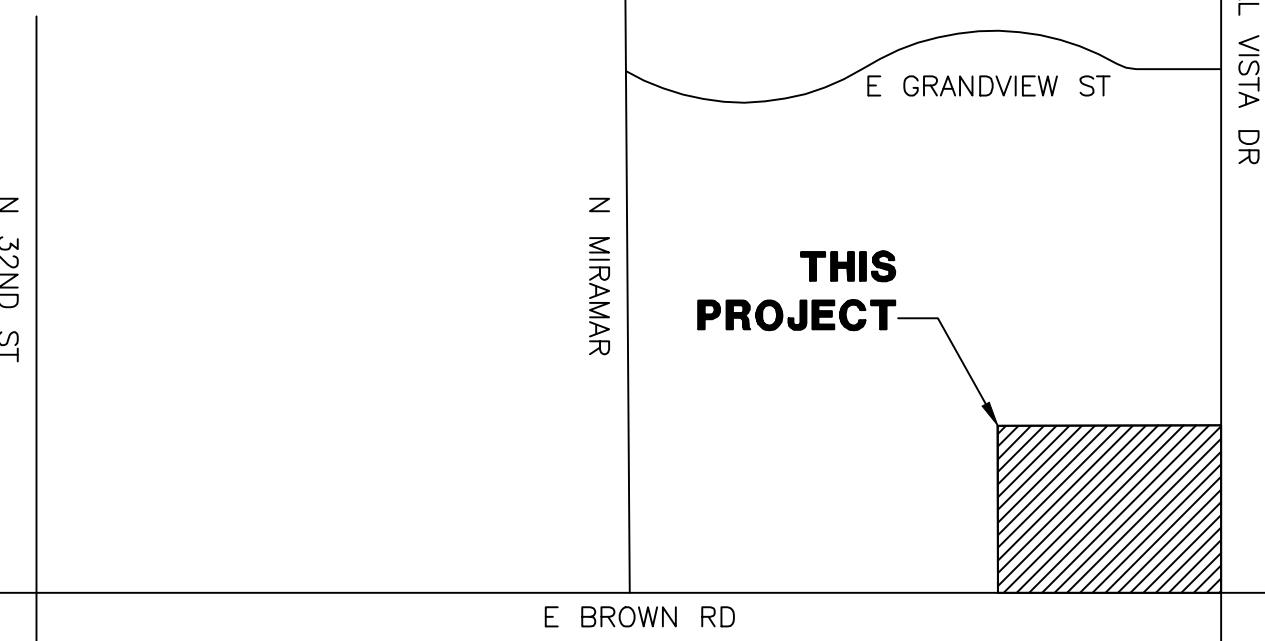
HORIZONTAL FOOTCANDLES  
Average 2.1  
Maximum 2.1  
Minimum 0.3  
Avg:Min 3.33  
Max:Min 7.00  
Coef Var 0.35  
UnifGrad 1.67

SIDEWALK

38 points  
HORIZONTAL FOOTCANDLES  
Average 2.2  
Maximum 7.8  
Minimum 0.0  
Avg:Min N/A  
Max:Min N/A  
Coef Var 1.01

PROPERTY LINE

38 points  
HORIZONTAL FOOTCANDLES  
Average 0.1  
Maximum 0.1  
Minimum 0.0  
Avg:Min N/A  
Max:Min N/A  
Coef Var 0.76



**VICINITY MAP**  
N.T.S.



#### SHEET INDEX

SHEET PH1 - PHOTOMETRIC CALCULATIONS  
SHEET PH2 - DETAILS

**CIVIL ENGINEER:**  
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**ELECTRICAL ENGINEER:**  
WRIGHT ENGINEERING CORPORATION  
165 EAST CHILTON DRIVE  
CHANDLER, AZ 85225  
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CONTACT: JACOB BIELEFELDT  
EMAIL: JBIELFELDT@WRIGHTENGINEERING.US



## D-Series Size 1

Legacy LED Area Luminaire

Specifications	1.0 ft² (0.09 m²)
Length:	33" (0.84 m)
Width:	13" (0.33 m)
Height H1:	7-1/2" (194 mm)
Height H2:	3-1/2" (89 mm)
Weight (max):	27 lbs (12.2 kg)

### 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 efficacy, 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 P7 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD G1

DSX1 LED	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX1 LED	Forward optics	80K 3000K	T1S Type I short	TSV Type V very short <sup>1</sup>	MVOLT <sup>2</sup> SPA
P1	P4	40K 4000K	T2S Type V short <sup>3</sup>	YVOL <sup>4</sup> SPA	Shipped included
P2	P5	50K 5000K	T3M Type II medium	RPFA <sup>5</sup> SPA	Square pole mounting
P3	P6	120°	T4M Type V medium <sup>6</sup>	RPFB <sup>7</sup> SPA	Round pole mounting <sup>8</sup>
Rotated optics	P10	P12	T5M Type II short	RPW <sup>9</sup> SPA	Wall bracket <sup>10</sup>
P11	P13 <sup>11</sup>	T6M Type II medium	LCCO <sup>12</sup> Left corner cutoff <sup>13</sup>	RPWU <sup>14</sup> SPA	Square pole universal mounting adapter <sup>15</sup>
T7M Type II medium	RCCO <sup>16</sup> Right corner cutoff <sup>17</sup>	T8M Type IV medium	TPM <sup>18</sup> Forward throw medium	KMAS DDBBX U	Left corner cutoff <sup>19</sup>
T9M Type IV medium	T10M Type V medium	T11M Type V medium	T12M Type V medium	KMAS DDBBX U	Right corner cutoff <sup>20</sup>
T13M Type V medium	T14M Type V medium	T15M Type V medium	T16M Type V medium	KMAS DDBBX U	Mast arm mounting bracket adapter <sup>21</sup>

Control options	Other options	Finish required	Generation required
Shipped installed	PIR	High/low motion/ambient sensor, 8'-15' mounting height, ambient sensor enabled at 36° <sup>22</sup>	DSX1 LED G1
NLAR2	PIR	Network, high/low motion/ambient sensor <sup>23</sup>	DSX1 LED G1
PIR	PER	Network, high/low motion/ambient sensor, 8'-15' mounting height, ambient sensor enabled at 36° <sup>24</sup>	DSX1 LED G1
PER	PIR	Seven-pin receptacle only (controls ordered separately) <sup>25</sup>	DSX1 LED G1
PER7	PIR	Seven-pin receptacle only (controls ordered separately) <sup>26</sup>	DSX1 LED G1
DMG	PIR	0-10V dimming wires pulled outside fixture (for use with external control, ordered separately) <sup>27</sup>	DSX1 LED G1
DS	FAO	Dual switching <sup>28</sup>	DSX1 LED G1

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DSX1 LED G1

Rev. 08/11/22

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### Performance Data

Lumen Output  
Lumen values are from photometric tests performed in accordance with IESNA LM-79-08.

### Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist.	20K (5000 K, 70 CRI)				40K (6000 K, 70 CRI)				50K (6000 K, 70 CRI)						
					L	G	LPW	Lumen	L	G	LPW	Lumen	L	G	LPW	Lumen			
T1S	6.0P	2	0	6.956	2	0	12	719	2	0	12	723	3	0	12	730			
T2S	6.483	1	0	120	6.984	2	0	2	729	2	0	2	731	3	0	2	733		
T3M	6.459	2	0	2	119	6.948	2	0	2	729	2	0	2	730	3	0	2	730	
T4M	6.468	1	0	2	118	6.927	1	0	2	729	1	0	2	731	3	0	2	731	
T5M	6.279	0	0	2	118	6.564	0	0	2	729	0	0	2	727	3	0	2	728	
T6M	6.327	1	0	2	117	6.815	1	0	2	726	1	0	2	728	3	0	2	728	
T7M	6.464	1	0	2	120	6.963	1	0	2	729	1	0	2	731	3	0	2	731	
T8M	6.722	2	0	0	124	7.243	0	0	0	734	3	0	0	736	3	0	0	736	
T9M	6.723	0	0	1	124	7.248	0	0	1	734	2	0	1	735	3	0	1	735	
T10M	6.711	3	0	1	124	7.229	3	0	1	734	3	0	2	736	3	0	2	736	
T11M	6.667	3	0	2	123	7.188	3	0	2	733	3	0	2	735	3	0	2	735	
T12M	6.579	0	0	2	123	7.071	0	0	2	730	5.231	0	0	2	737	5	0	2	737
UCO	3.943	1	0	2	73	4.248	1	0	2	79	4.302	1	0	2	80	5	0	2	80
T1S	8.249	2	0	2	118	8.865	2	0	2	127	8.999	2	0	2	129	8	0	2	129
T2M	8.233	0	0	2	118	8.530	0	0	2	127	8.923	0	0	2	129	8	0	2	129
T3M	8.240	2	0	2	118	8.877	2	0	2	127	8.889	2	0	2	128	8	0	2	128
T4S	8.262	2	0	2	118	9.005	2	0	2	127	9.013	2	0	2	129	8	0	2	129
T5M	8.021	1	0	2	118	8.631	1	0	2	124	8.638	1	0	2	125	8	0	2	125
T6M	8.083	2	0	2	118	8.708	2	0	2	124	8.818	2	0	2	126	8	0	2	126
T7M	8.257	2	0	2	118	8.895	2	0	2	127	9.008	2	0	2	129	8	0	2	129
T8M	8.588	3	0	2	123	7.188	3	0	2	133	7.273	3	0	2	135	8	0	2	135
T9M	8.579	0	0	2	123	7.253	0	0	2	133	9.030	0	0	2	134	8	0	2	134
UCO	8.573	3	0	2	122	9.547	1	0	2	78	2.546	1	0	2	79	2	0	2	79
T10M	8.517	3	0	2	122	9.517	4	0	2	131	9.291	4	0	2	133	8	0	2	133
UCO	8.508	1	0	2	72	5.427	1	0	2	78	12.721	3	0	3	125	8	0	3	125
T1S	11.661	0	0	2	114	12.562	0	0	2	123	12.721	3	0	3	125	12	0	3	125
T2M	11.648	2	0	2	114	12.548	3	0	2	123	12.741	2	0	2	125	12	0	2	125
T3M	11.679	2	0	2	115	12.548	3	0	2	123	12.741	2	0	2	125	12	0	2	125</td